

REMARKS

At the outset, Applicants bring to the attention of the Examiner the attached Petition under 37 C.F.R. § 1.48(a) to correct the inventorship of the present application by adding Mr. Tadashi Kitamura as an inventor. Currently, the present application only names Mr. Masahiro Yamamoto as an inventor.

In this Amendment, Applicants propose canceling claims 40-48, without prejudice or disclaimer of the subject matter thereof, and amending claims 20 and 22 to incorporate the subject matter of canceled claim 48. As a result of this Amendment, claims 20-39 and 49-50 will be currently pending.

In the Final Office Action, the Examiner rejected claims 20-24 and 28-50 under 35 U.S.C. § 102(b) as being anticipated by an article to Hashimoto et al., and rejected claims 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto et al. in view of Aoyama (U.S. Patent No. 5,398,292).

Applicants thank the Examiner for granting an interview with Applicants' representatives on July 22, 2004. During the interview, Applicants' representatives discussed Hashimoto et al. ("High-Speed template Matching Algorithm Using Information of Contour Points") reference and claims 20 and 48 (a copy of the Examiner Interview summary is attached for the Examiner's convenience). More specifically, Applicants' representatives pointed out that Hashimoto et. al. does not teach each and every element of claim 20. Further, Applicants' representatives pointed out that Hashimoto et al. does not disclose at least "means for converting said design data into said reference pattern by correcting said design data with respect to deformation which may occur in said pattern to-be-inspected," as recited in claim 48. An agreement was

reached with the Examiner, whereby the Examiner acknowledged that "the claimed 'deformation' per se is not close [sic] in the cited section of the reference." See attached Examiner Interview Summary. In light of the agreement reached with the Examiner, Applicants file this response traversing the rejection of claims 20-50, as detailed above, for the following reasons.

Rejection under 35 U.S.C. § 102(b)

Applicants respectfully traverse the rejection of original claims 20-24 and 28-50 under 35 U.S.C. § 102(b) as being anticipated by Hashimoto et al. for the following reasons.

Applicants propose to cancel claims 40-48 without prejudice or disclaimer of the subject matter thereof, thereby rendering the rejection of those claims moot. However, as noted above, pending claims 20 and 22 have been amended to recite subject matter of claim 48. The rejections of claims 20-24, 28-39, and 49-50 are discussed below.

In order to properly anticipate Applicants' claimed invention under 35 U.S.C. § 102(b), the Examiner must show that each and every element of each of the claims in issue is found, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. §2131, page 2100-69, 8th Ed., August 2001, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Further, "the elements must be arranged as required by the claim." M.P.E.P. §2131, p.2100-69.

Claim 20, as amended, recites a pattern inspection apparatus comprising, among other things, "means for converting said design data into said reference pattern by

correcting said design data with respect to a deformation which may occur in said pattern to-be-inspected."

As agreed to by the Examiner during the interview of July 22, 2004, "the claimed 'deformation' per se is not disclose [sic] in the cited section of the reference." See attached Examiner Interview Summary. Accordingly, Hashimoto et al. necessarily fails to disclose at least "means for converting said design data into said reference pattern by correcting said design data with respect to a deformation which may occur in said pattern to-be-inspected," (emphasis added) as recited in claim 20. Therefore, the rejection of claim 20 under 35 U.S.C. § 102(b) is improper, and Applicants respectfully request the Examiner to withdraw the rejection of claim 20 and the claim allowed.

Claim 22, although different in scope, contains recitations similar to allowable claim 20 including "means for converting." Thus, for the reasons noted above regarding claim 20, and in accordance with the agreement reached with the Examiner, Hashimoto et al. does not disclose each and every element of claim 22. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 22 and the claim allowed.

Claims 21, 23-24, 28-39, and 49-50 are also allowable at least in view of their dependency, directly or indirectly, from allowable claims 20 and 22.

Rejection under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 25-27 under 35 U.S.C. §103(a) because a *prima facie* case of obviousness has not been established by the Examiner.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or

suggest all the claim elements. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Third, there must be a reasonable expectation of success. See M.P.E.P. § 2143.

The Examiner rejected claims 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto et al. in view of Aoyama. Claims 25-27 depend from claim 22. As discussed above regarding claim 22, Hashimoto et al. fails to teach or suggest each and every element of claim 22. Specifically, Hashimoto et al. does not teach or suggest at least "means for converting said design data into said reference pattern by correcting said design data with respect to a deformation which may occur in said pattern to-be-inspected," as recited in claim 22.

Aoyama fails to cure the above-noted deficiencies of Hashimoto et al. Aoyama does not teach or suggest at least "means for converting said design data into said reference pattern by correcting said design data with respect to a deformation which may occur in said pattern to-be-inspected," as recited in claim 22. Therefore, at least because Hashimoto et al. and Aoyama, either taken alone or in combination, fail to teach or suggest each and every element of independent claim 22, the Examiner has failed to establish a *prima facie* case of obviousness for claims 25-27, which depend from claim 22. Accordingly, Applicants respectfully submit that claims 25-27 are also allowable at least in view of their dependency from allowable claim 22.

Further, Applicants respectfully disagree with the Examiner's statement that "it would have been obvious ... to combine the two references as they are analogous because they are solving the similar problem of mask inspection." Office Action at page

4. Hashimoto et al. discloses a high-speed template matching technique. Id. at Summary. In contrast, Aoyama relates to an apparatus for detecting an edge appearing in a picture, and more specifically to an edge detecting apparatus for detecting a white line on a road based on the image formation of the road surface in order to implement automatic driving of a vehicle. Contrary to the Examiner's assertion, the two references, one directed to a high-speed template matching technique and the other directed to detecting a white line on a road, are not analogous. Therefore, there is no motivation to combine the teachings of Hashimoto et al. with those of Aoyama.

Because Hashimoto et al. and Aoyama, either taken alone or in combination, do not teach or suggest the recitations of claims 25-27, and there is no motivation to combine the teachings of Hashimoto et al. with those of Aoyama, the Examiner has failed to establish a prima facie case of obviousness for claims 25-27. Accordingly, Applicants respectfully request the Examiner to allow these claims.

Conclusion

Applicants request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner. The proposed amendments of claims 20 and 22 do not raise any new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships were earlier claimed. This Amendment should therefore allow for immediate action by the Examiner.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: September 3, 2004

By: Rajeev Gupta
Rajeev Gupta
Reg. No. 55,873

Interview Summary



Application No.

09/648,372

Applicant(s)

Examiner

VIKRAM BAI

Art Unit

2623

All participants (applicant, applicant's representative, PTO personnel):

- (1) Rajeev Gupta, # 55,873
(2) David Sottg, # 34,731

- (3) Tadashi Kitamura, NGR representative
(4) Hirofumi Motochima, NGR representative

Date of Interview: _____

Type: a) ☐ Telephonic b) ☐ Video Conference
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____

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Claim(s) discussed: 20 & 48

Identification of prior art discussed: Hashimoto.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: SEE BELOW.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Applicant's attorney argued that the cited reference fails to disclose the claim 20 & 48. Examiner after the arguments does reach to a agreement for the claimed "deformation" per se is not disclose in the cited section of the reference.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required